



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,634	07/30/2003	Hiroshi Iwai	2003_1059A	9147
513 7590 02/05/2007 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			EXAMINER PHAM, TUAN	
			ART UNIT	PAPER NUMBER
			2618	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/629,634	Applicant(s) IWAI ET AL.	
	Examiner TUAN A. PHAM	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 12/08/2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21 and 23-38 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-37 is/are allowed.
- 6) ☒ Claim(s) 21, 23-30, and 38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114'***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/08/2006 has been entered.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 10/12/2006 has been considered by Examiner and made of record in the application file.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

Art Unit: 2618

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**4. Claims 21, 23-30, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silzer, Jr. (Pub. No.: US 2004/0001022) in view of Dosch (Patent No.: US 6,587,698).**

**Regarding claim 21,** Silzer teaches a portable radio communication apparatus comprising:

a housing containing a radio communication circuit (see figure 1A, PDA 10, the housing of PDA 10 which enclosed the circuitry, [0026]),

a projection portion (read on handle) having a first end portion connected to said housing (see figure 6A, handle 50), and a second end portion connected to said housing (see figure 6A, handle 50), and a central portion located between the first and second end portions (see figure 6A, handle 50), the projection portion being fixed to the housing (see figure 2A, the trap 18 is fixed on to the PDA 10), wherein when said housing is mounted on a flat surface (see figure 5B, 6E, the housing of PDA is mounted on the flat surface), a mounting surface of said housing opposes the flat surface and is floated from the flat surface by said projection portion (see figure 5B, 6E, the housing of PDA is mounted on the flat surface), thereby separating the antenna element from the

Art Unit: 2618

flat surface (see figure 5B, 6E, the housing of PDA is mounted on the flat surface, the distance between the antenna and the flat surface that separation the antenna to the flat surface).

It should be noticed that Silzer fails to teach an antenna element connected to the radio communication circuit through a feeding point which is arranged in said housing, wherein one part of said antenna element is mounted in at least one of an inner part of said projection portion. However, Dosch teaches an antenna element (see figure 3, antenna 16) connected to the radio communication circuit (see TX/RX module 4) through a feeding point (the feeding point is the point connected between the module 4 and antenna 16b) which is arranged in said housing, wherein one part of said antenna element is mounted in at least one of an inner part of said projection portion (see projection part 8, antenna 16b, col.2, ln.11-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Dosch into view of Silzer in order to give the user a easy to carry out as suggested by Dosch at col.1, ln.20-25.

**Regarding claim 23**, Silzer further teaches the central portion of said projection portion extends in parallel to a width direction of said portable radio communication apparatus, and the first and second end portions are bent from opposite ends of the central portion, respectively (see figure 6A, handle 50).

**Regarding claim 24**, Silzer further teaches said projection portion is shaped as an arch (see figure 6A, handle 50).

**Regarding claim 25**, Dosch further teaches a thickness of each of said first and second end portions of said projection portion is larger than a thickness of the central portion of said projection portion (see figure 3, the first and second end is larger than the central portion).

**Regarding claim 26**, Dosch further teaches a width of each of the first and second end portions of said projection portion is larger than a width of the central portion of said projection portion (see figure 3).

**Regarding claim 27**, Silzer further teaches said projection portion is detachably connected to said housing (see 0030]).

**Regarding claim 38**, Silzer further teaches said projection portion is a boom portion (see figure 6A, handle 50).

**5. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silzer, Jr. (Pub. No.: US 2004/0001022) in view of Dosch (Patent No.: US 6,587,698) as applied to claim 21 above, and further in view of Yagi (Pub. No.: US 2003/0184494).**

**Regarding claim 28**, Silzer and Dosch, in combination, fails to teaches dielectric. However, Yagi teaches such features (see [0024]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Yagi into view of Silzer and Dosch in order to prevent bias from adversely affecting the antenna's characteristics as suggested by Yagi at [0024].

Art Unit: 2618

**Regarding claim 29**, Yagi further teaches elastic resin material (see [0024]).

**Regarding claim 30**, Yagi further teaches conductor material (see [0024]).

### ***Allowable Subject Matter***

6. Claims 31-37 are allowed.

### **Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Application/Control Number: 10/629,634

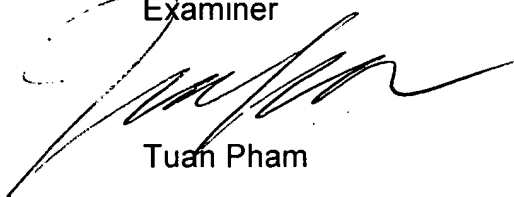
Page 7

Art Unit: 2618

you have question on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2618  
January 29, 2007  
Examiner

A handwritten signature in black ink, appearing to read 'Tuan Pham', written over the printed name.

Tuan Pham

Supervisory Patent Examiner  
Technology Center 2600

A handwritten signature in black ink, appearing to read 'Matthew Anderson', written over the printed name.

Matthew Anderson